

# First Nearctic record of *Neostempellina* Reiss, with description of a new species

(Insecta, Diptera, Chironomidae)

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*Neostempellina reissi*, spec. nov. is described based upon an adult male from north-central Maine, USA. The specimen represents the first Nearctic record for the genus. The diagnosis for *Neostempellina* is emended to include all described species. The new species is easily recognized by characters of the antenna and hypopygium.

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## Introduction

*Neostempellina* was established by Reiss (1984) to accommodate the European species, *N. thienemanni*, with *N. pilosa* subsequently described from Turkey (Reiss 1987). A third species from central Africa, *N. abnormis* (Lehmann, 1981), was recently transferred from *Tanytarsus* by Ekrem & Reiss (1999). An additional African species, *Tanytarsus saetosus* Lehmann, 1981 also belongs to *Neostempellina* (Stur & Ekrem, this volume). A total of five species are now described for the genus. Initially regarded as a Palaearctic monotypic genus by Pinder & Reiss (1986), and as a Palaearctic endemic by Ashe et al. (1987), it now includes Palaearctic, Afrotropical, and Nearctic records. Additional unpublished records include other zoogeographical regions (M. Spies, T. Ekrem, pers. comm.).

The immature stages of the genus are known only for *N. thienemanni* which has been confused previously with *Stempellina montivaga* Goetghebuer, a junior synonym of *S. bausei* (Kieffer) (Reiss 1984). The differential diagnoses given by Reiss (1984) should enable recognition of pupae and larvae of *N. thienemanni*.

## Methods

Standard morphological terminology and methodology follow a combination of Epler (1988), Oliver & Dillon (1989), and Sæther (1980). Unless otherwise stated, measurements are given in  $\mu\text{m}$ .

## *Neostempellina* Reiss, emended

**Diagnosis.** Antenna with 10-13 flagellomeres; AR 0.4-1.05. Acrostichals 8-14, dorsocentrals 5-8. Wing length 0.76-1.50 mm. Anal tergal bands of V- or T-type; median longitudinal band of "T" long, or short and thin, connected to transverse bands. Anal point moderately long to long, relatively slender, rounded posteriorly; or relatively short, tapered to a point; or basally and medially widened, and distally constricted to a point. Anal crests dorsally somewhat U-, Y-, or more or less V-shaped. Digitus present or absent. Median volsella absent; or short and with several apical, broadened setae. Gonostylus tapering to a point, or with rounded apex. Otherwise as in Cranston et al. (1989).

### *Neostempellina reissi*, spec. nov.

Fig. 1

**Types.** Holotype: adult ♂ (on slide, in Canada balsam), USA, Maine, Piscataquis County, Baxter State Park, Abol Pond and outlet stream, 6.VI.1987, leg. B. A. Caldwell; deposited in Florida State Collection of Arthropods (FSCA) at Florida A&M University, Tallahassee, Florida, USA.

**Etymology.** Named in honor of the late Dr. Friedrich Reiss, acknowledging his distinguished career in the study of chironomids, and his helpful nature. Since he could not carry out his intention to describe this new species himself, it is here established in his name.

**Diagnosis.** The male of *Neostempellina reissi*, spec. nov. is recognizable by the following combination of characters: Antenna with 10 flagellomeres, AR 1.05; T-type anal tergal bands present; anal point relatively short, abruptly narrowed distally to a sharp point; anal crests well developed, forming a Y-shape on anal tergite and anal point; superior volsella elliptical, digitus present; gonostylus straight, somewhat club-shaped, with rounded apex.

## Description

### Adult male.

Coloration (in Canada balsam). Thorax brown, with a noticeably lighter brown latero-central area, including the anterior anepisternum II and part of the area dorsal of prescuto-scutal suture; the lighter area appears somewhat circular, except for the median anepisternum II. Head, legs, and abdomen light brown.

Head. Eyes hairy. Temporal setae 5, inner and outer verticals not separable. Antenna with 10 flagellomeres, fm 2 apparently composed of 2-3 fused flagellomeres; AR 1.05. Terminal flagellomere with subapical seta. Clypeus with 5 setae. Third palpomere longest, lengths pm 2-5: 46, 127, 97, 111.

Thorax. Antepronotal lobes short, scutum overreaching antepronotum; 7 uniserial dorsocentrals, 9 acrostichals, 1 prealar seta; 2 scutellars.

Wing. Length 1.23 mm. Venarum ratio 1.33. Vein M without setae,  $R_{4+5}$  and  $M_{1+2}$  bare for about basal  $\frac{1}{3}$  of their respective lengths. Brachiolum with 1 seta.

Legs. Spur of front tibia extremely short, hard to discern. Leg lengths and proportions:

	fe	ti	ta <sub>1</sub>	ta <sub>2</sub>	ta <sub>3</sub>	ta <sub>4</sub>	ta <sub>5</sub>	LR	BV	SV
P <sub>1</sub>	513	389	432	275	173	124	86	1.11	2.02	2.09
P <sub>2</sub>	529	437	232	140	113	86	70	0.53	2.92	4.16
P <sub>3</sub>	632	540	319	205	167	108	81	0.59	2.66	3.67

Abdomen. Setation of tergites, excluding I and IX, with long setae in two transverse rows, one more or less uniserial anterior, and one median; 10 or less setae per row. Sternite I bare; S II with at least 3 long median setae; other sternites with long anterior and median setae as follows: S III 2-4; S IV-VI 4-4; S VII 7-6; S VIII 14, median only.

Hypopygium (Fig. 1). Anal tergal bands of T-type, median longitudinal band thin. Anal point wide basally and medially, distally constricted into a point. Anal crests forming Y-shape, extending posteriorly from anal tergite to constriction of anal point. Anal tergite with 4 setae on each side of longitudinal anal tergal band, anteriormost pair longest and slightly more robust; caudal margin of anal tergite in dorsal aspect with long setae on each side of anal point. Superior volsella elliptical, with 1 proximo-

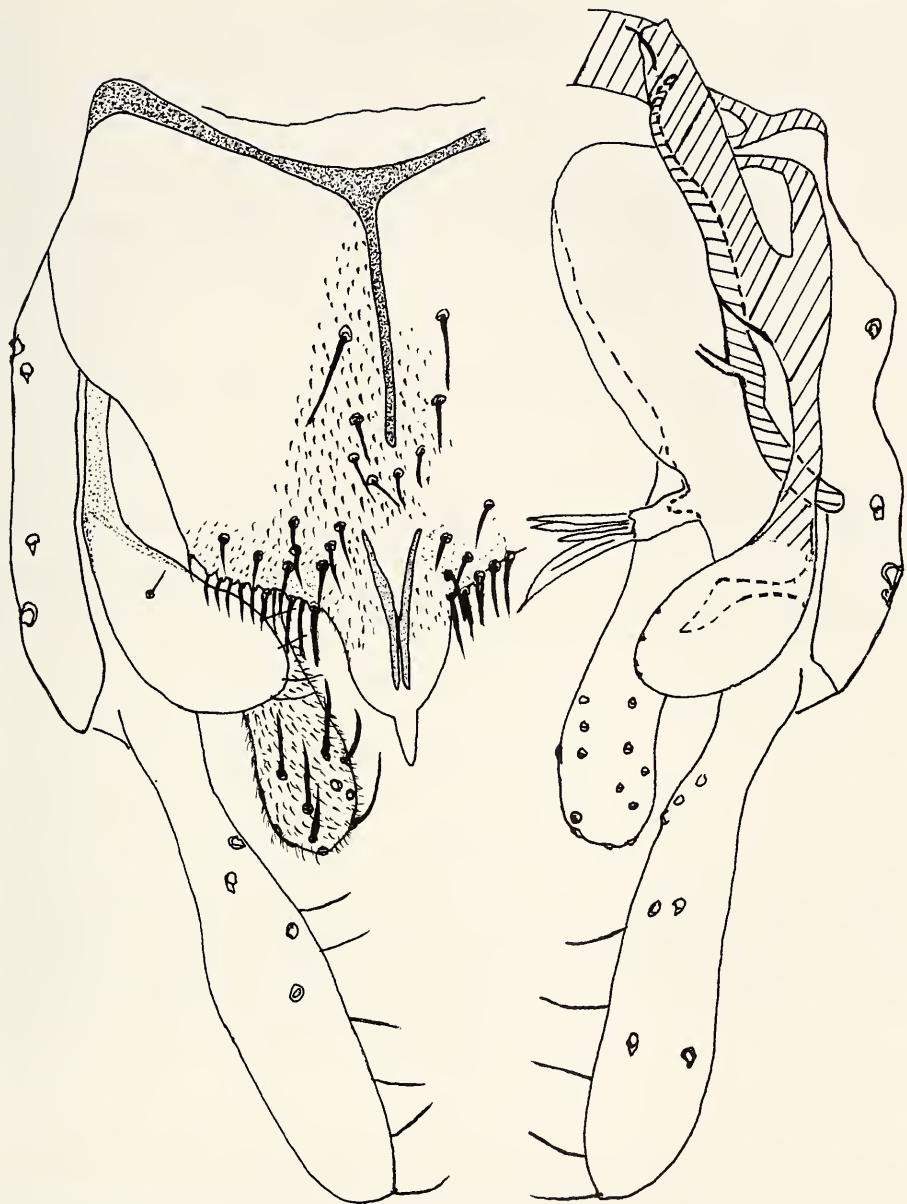


Fig. 1. *Neostempellina reissi*, spec. nov.; adult male genitalia, dorsal view.

dorsal and 4 distal-median setae; digitus present. Inferior volsella slightly expanded distally. Gono-stylos straight, narrowed basally, somewhat club-shaped, with rounded apex.

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